

AMENDMENTS TO THE CLAIMS:

**This listing of claims will replace all prior versions and listings of claims in the application:**

LISTING OF CLAIMS:

1. (currently amended) An electrical circuitry inspection method comprising:  
performing reference based inspection of electrical circuitry to be inspected,  
including:  
for each of a plurality of types of local characteristics, each type occurring at least once within said electrical circuitry to be inspected, identifying at least one portion of interest within the electrical circuitry whereat said local characteristic is expected to occur; and  
inspecting an image of each of said at least one portion of interest, using a selected an-inspection task employing information defining said portion of interest and additional inspection information relevant to said portion of interest, said inspection task being selected from among a plurality of different inspection tasks in response to the type of local characteristic expected to occur in the portion of interest.
2. (original) A method according to claim 1, wherein said plurality of types of local characteristics includes at least one of the following types: a bonding pad; a ball structure; a target; a chip area.
3. (original) A method according to claim 1, wherein said identifying of at least one portion of interest comprises identification of at least one spatial region within said electrical circuitry.
4. (original) A method according to claim 3, wherein said identification of at least one spatial region is at least partly based on a user input.

5. (original) A method according to claim 3, wherein said identification of at least one spatial region is at least partly based on a computer generated input.

6. (original) A method according to claim 4, wherein said identification of at least one spatial region is at least partly based on a computer generated input.

7. (original) A method according to claim 1, and also comprising computer-assigning an inspection task to at least one individual portion of interest in response to the type of local characteristic expected to occur in the individual portion of interest.

8. (original) A method according to claim 1, and also comprising outputting at least one indication of defects responsive to said inspecting step.

9. (currently amended) Electrical circuitry inspection apparatus comprising:

a reference based inspector performing reference based inspection of electrical circuitry to be inspected, said reference based inspector including:

a portion of interest identifier operative, for each of a plurality of types of local characteristics, each type occurring at least once within said electrical circuitry to be inspected, to identify at least one portion of interest within the electrical circuitry whereat said local characteristic is expected to occur; and

an image inspector inspecting an image of each of said at least one portion of interest, using a selected an-inspection task employing information defining said portion of interest and additional inspection information relevant to said portion of interest, said inspection task being selected from among a plurality of different inspection tasks in response to the type of local characteristic expected to occur in the portion of interest.

10. (original) Apparatus according to claim 9, wherein said plurality of types of local characteristics includes at least one of the following types: a bonding pad; a ball structure; a target; a chip area.

11. (original) Apparatus according to claim 9, wherein said identifier identifies at least one spatial region within said electrical circuitry.

12. (original) Apparatus according to claim 11, wherein said identifier identifies at least one spatial region at least partly based on a user input.
13. (original) Apparatus according to claim 11, wherein said identifier identifies at least one spatial region is at least partly based on a computer generated input.
14. (original) Apparatus according to claim 12, wherein said identifier identifies at least one spatial region at least partly based on a computer generated input.
15. (original) Apparatus according to claim 9, and also comprising a task assigner computer-assigning an inspection task to at least one individual portion of interest in response to the type of local characteristic expected to occur in the individual portion of interest.
16. (original) Apparatus according to claim 9, and also comprising a defect indicator outputting at least one indication of defects responsive to output generated by said image inspector.